Response to SAPCB's 3 draft State Operating Permits for sulfur dioxide (SO2) control at the Mirant Potomac River Generating Station and to two legal issues: intermittent controls and stack-merge project

Elizabeth Chimento 1200 North Pitt St. Alexandria, VA 22314 (703) 548-7939

At the onset and primary to my specific remarks, I state:

- 1. A state operating permit is preferable to any consent order.
- 2. A comprehensive SOP should be issued as soon as possible that limits criteria and toxic air pollutant emissions and which are shown by modeling to be protective of all NAAQS, <u>including PM 2.5</u> and SAAC under all weather conditions and operating scenarios.
 - 3. I ask for a local air pollution control district to be established in Alexandria.

In reviewing the three proposed SOP options to control SO2 at the Mirant plant, I can support all three for a limited time, but with marked exceptions stated below and including those addressed by the City in its comments.

Permit Option 1

I can endorse Option 1 because it does not require predictive modeling or ambient monitoring for intermittent control usage. However, this option depends on multiple operating plans which complicate and limit the ability to monitor and gauge compliance.

Permit Options 2 and 3

I can only support Options 2 and 3 if predictive modeling and ambient monitoring are replaced by standard pre-set emission limits. Further, the use of predictive modeling is denied by both federal and state law in establishing permits. Again, Options 2 and 3, if put in place, must be for a short duration only.

Legal Questions

Regarding the first legal issue: Are intermittent controls allowed as part of the permit and if not, are they allowed during a phase-in period or in a consent order?

I support the City's position that the "use of intermittent controls that vary the rate of emissions based on atmospheric conditions or ambient pollutant concentrations is

a prohibited dispersion technique under federal and state regulations. 40 CFR 51.100(nn), 40 CFR 51.100(hh)(1)(ii), and 9 VAC 5-10-20.

Regarding the second legal issue: Is the proposed stack-merge project prohibited under federal or state law as a prohibited dispersion technique?

Again, I support the City's position that "the stack merger, as proposed by Mirant, is a prohibited dispersion technique under federal and state regulations. 40 CFR 51.100(hh)(1)(iii) and 9 VAC 5-10-20. I am opposed to Mirant taking dispersion credits prohibited by federal law which would result in increased net emissions from this plant.

Regarding PRGS' installation of trona (sodium sesquicarbonate) without public health studies confirming that trona has no ill effects, Mirant disregarded that fact and initiated trona injections at the facility. Per my May 4th comments to the Board, trona injections have caused multiple problems, both in public health issues and in plant operations. Not only does the Material Safety Data Sheet associate irritation of the eyes, skin, nose and throat with trona exposure, the trona manufacturer's brochure states that trona is corrosive, having a pH of 10.1. Also, the DOE Special Environmental Analysis reports that trona use increases pH in the plant's fly ash (SEA 99-100).

In plant operations, trona causes clogging, blockages and flow problems which result in "loss of precipitator fields," opacity problems and breakdowns (plant manager, 4/10/07, SAPCB discussion). To date, spanning the last 10 months, over 396 opacity exceedances of the 6-minute limit have occurred at the facility. Each of these opacity events puts the health of over 3000 people living near the plant at risk.

While it may not be possible, due to time constraints, to replace trona and upgrade the plant's pollution control technology at this time, I request that BACT or LAER be included in the facility's comprehensive SOP, to be completed as soon as possible.

Finally, I bring to the Board's attention that meteorologist David Sullivan's downwash modeling analysis of S02, initially validating SO2 exceedances from the plant in the nearby neighborhood, was completed in March 2004. Since that time, what should have been a scientifically respectable and straight forward approach to immediately protect public health has, instead, resulted in an elongated series of obstructions which have insured continued corporate profits at the expense and neglect of public health. From changing standard EPA approved modeling methodologies, to arbitrarily using partial and scattered monitoring devices, to using predictive modeling and intermittent controls, which do not fully protect NAAQS, and which give the Mirant plant the unheralded and signal distinction of being the only facility in the US using such an unorthodox operation, it is clear that the status quo has been maintained while public health has remained at risk.

I ask you to reverse this history and to put public health protection first and foremost in your decisions regarding the PRGS, realizing that safeguarding health is the primary and essential responsibility of both the DEQ and the Board.

Thank you for the opportunity to respond to the three SOP options for S02 control and the two legal questions.